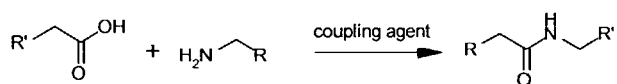
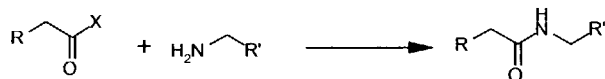
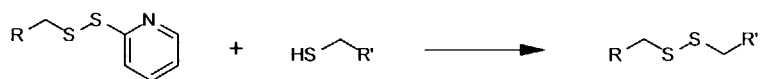
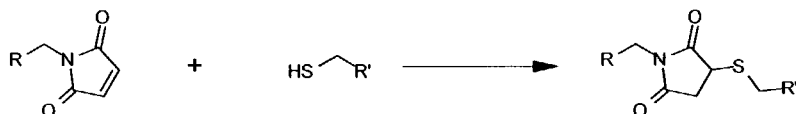
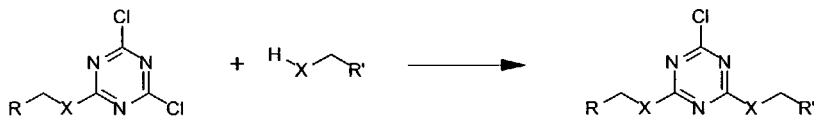


Figure 1. Examples of Conjugation Methods for Attachment of Antigen(s) or Ligands to Lipids.**Amide bond formation**

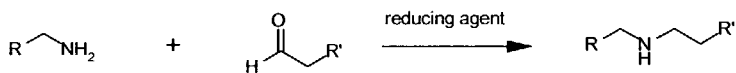
R = lipid X = N-hydroxysuccinimide, pentafluorophenol, etc. R' = protein, peptide, small molecule

Thioether or disulfide bond formation

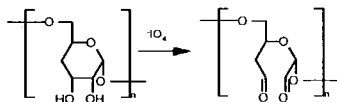
R = lipid R' = protein, peptide, small molecule

Alkylation

R = lipid X = O, N, S R' = protein, peptide, small molecule



R = lipid R' = glycoprotein, carbohydrate or polysaccharide, small molecule in the glycoprotein or polysaccharide the aldehyde functionality is generated as shown below

**Chelation**